

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.

AMENDMENTS TO THE CLAIMS:

1. (Currently Amended) An occipital plate comprising:  
a Y-shaped plate portion having a front side and a back side, a central portion,  
at least one two-leg portions, a plurality of bone screw holes in the central portion, and at  
least one a-bushing; wherein the holes are configured and dimensioned to receive the  
bushing; and  
at least one clamping portion disposed on the front side proximate a free end  
of the at least one of the leg portions; wherein the clamping portion comprises a pivot  
member and a clamp plate, the clamp plate being pivotable about the pivot member and  
includes an extension sized and configured to engage an arcuate stepped-in portion formed on  
the leg portion of the plate to limit the amount of pivot between the clamp plate and the plate.  
~~wherein the plate is bendable to conform to an occiput.~~
2. (Original) The occipital plate of claim 1, wherein the central  
portion includes an upper portion, a lower portion, and a grooved portion therebetween, the  
upper portion having one bone screw hole.
3. (Original) The occipital plate of claim 2, wherein the grooved  
portion is flexible to permit the upper portion to be disposed at an angle with respect to the  
lower portion.
4. (Original) The occipital plate of claim 2, wherein the leg portions  
and at least a portion of the central portion are disposed in nonparallel planes.
5. (Original) The occipital plate of claim 4, wherein the planes  
intersect at an angle of between about 160° and about 175°.
6. (Original) The occipital plate of claim 5, wherein the planes  
intersect at an angle of about 170°.
7. (Canceled)
8. (Currently Amended) The occipital plate of claim 1 ~~7~~, wherein  
the clamp plate further comprises a hole, the pivot member being received in the hole.
9. (Original) The occipital plate of claim 8, wherein the pivot  
member further comprises a tapered portion with serrations, and the leg portion further

comprises a tapered hole with serrations, wherein the serrations of the tapered portion positively engage the serrations of the tapered hole.

10. (Currently Amended) The occipital plate of claim 9, wherein the diameter of the tapered hole decreases ~~increases~~ from the back side to the front side.

11. (Original) The occipital plate of claim 10, wherein the clamp plate is secured to the pivot member with a fastener.

12. (Original) The occipital plate of claim 7, wherein the leg portion additionally comprises a rod-receiving first recess and the clamping plate additionally comprises a rod-receiving second recess, the first and second recesses generally opposing each other.

13. (Original) The occipital plate of claim 12, wherein the second recess is serrated.

14. (Original) The occipital plate of claim 2, wherein the bone screw holes in the lower portion are disposed in a rectangular array.

15. (Original) The occipital plate of claim 14, wherein at least one group of bone screw holes in the array is disposed along a central axis of the plate extending between the leg portions.

16. (Original) The occipital plate of claim 15, wherein the bone screw hole in the upper portion is disposed on the central axis.

17. (Original) The occipital plate of claim 2, wherein at least two bone screw holes are disposed coaxially.

18. (Previously Amended) The occipital plate of claim 1, wherein the bushings permit polyaxial angulation.

19. (Previously Amended) The occipital plate of claim 1, wherein the plate is bendable along at least two generally parallel axes.

20. (Previously Amended) The occipital plate of claim 1, wherein the plate is bendable along at least two generally perpendicular axes.

21. (Previously Amended) An occipitocervical fixation system comprising:  
an occipital plate comprising at least one rod clamp portion and a plate portion with at least one hole for receiving a bone screw, the rod clamp portion having a post, a pivotable clamp plate with a hole for receiving the post, and a fastener for tightening the clamp to the post;  
at least one bone screw; and  
at least one rod,  
wherein the rod is retained between the plate portion and the clamp plate and is pivotable about the post,  
wherein the plate further includes an arcuate stepped-in portion adjacent the post and the clamp plate further includes an extension sized and configured to engage the arcuate stepped-in portion.
22. (Cancelled)
23. (Cancelled)
24. (Previously Presented) The occipital plate of claim 18, wherein the exterior surface of the bushing has a frustospherical shape.
25. (Previously Presented) The occipital plate of claim 18, wherein the bushing further includes at least one slot located on a sidewall thereof.
26. (Previously Presented) The occipital plate of claim 25, wherein the sidewall further includes a ridge.
27. (Previously Presented) The occipital plate of claim 12, wherein the rod-receiving first recess has a V-shaped recess.
28. (Previously Presented) The occipitocervical fixation system of claim 21, wherein the arcuate stepped in-portion extends through an angle of about 80 degrees to about 120 degrees.
29. (Previously Presented) The occipitocervical fixation system of claim 21, wherein the plate further includes a post hole sized and configured to receive the post.

30. (Previously Presented) The occipitocervical fixation system of claim 29, wherein the post further comprises a tapered portion with serrations, and the post hole further comprises a tapered hole with serrations, wherein the serrations of the tapered portion positively engage the serrations of the tapered hole.

31. (Currently Amended) The occipitocervical fixation system of claim 30, wherein the diameter of the tapered hole ~~decreases~~ increases from the back side to the front side.

32. (Previously Presented) The occipitocervical fixation system of claim 29, wherein the plate further comprises a rod-receiving first recess and the clamp plate further comprises a rod-receiving second recess, the first and second recesses generally opposing each other.

33. (Previously Presented) The occipitocervical fixation system of claim 32, wherein the second recess is serrated.

34. (Previously Presented) The occipitocervical fixation system of claim 32, wherein the rod-receiving first recess has a V-shaped recess.

35. (Previously Presented) The occipitocervical fixation system of claim 21, wherein the rod is positionable in the at least one clamp portion by insertion from a top portion of the assembly.

36. (Previously Presented) The occipitocervical fixation system of claim 21, wherein the plate portion has an upper portion, a lower portion, and a grooved portion therebetween, the upper portion having one bone screw hole.

37. (Previously Presented) The occipitocervical fixation system of claim 36, wherein the grooved portion is flexible to permit the upper portion to be disposed at an angle with respect to the lower portion.

38. (Previously Presented) The occipitocervical fixation system of claim 36, wherein the bone screw holes in the lower portion are disposed in a rectangular array.

39. (Previously Presented) The occipitocervical fixation system of claim 38, wherein at least one group of bone screw holes in the array is disposed along a central axis of the plate extending between the leg portions.

40. (Previously Presented) The occipitocervical fixation system of claim 39, wherein the bone screw hole in the upper portion is disposed on the central axis.

41. (Previously Presented) The occipitocervical fixation system of claim 36, wherein at least two bone screw holes are disposed coaxially.

42. (Previously Presented) The occipitocervical fixation system of claim 21, wherein the rod clamp portion and the plate portion are disposed in nonparallel planes.

43. (Previously Presented) The occipitocervical fixation system of claim 42, wherein the planes intersect at an angle of between about  $160^{\circ}$  and about  $175^{\circ}$ .

44. (Previously Presented) The occipitocervical fixation system of claim 42, wherein the planes intersect at an angle of about  $170^{\circ}$ .

45. (Previously Presented) The occipitocervical fixation system of claim 21, wherein the plate further includes a bushing; the at least one bone screw hole being sized and configured to receive the bushing to permit polyaxial angulation.

46. (Previously Presented) The occipitocervical fixation system of claim 45, wherein the exterior surface of the bushing has a frustospherical shape.

47. (Previously Presented) The occipitocervical fixation system of claim 45, wherein the bushing further includes at least one slot located on a sidewall thereof.

48. (Previously Presented) The occipitocervical fixation system of claim 47, wherein the sidewall further includes a ridge.

49. (Previously Presented) The occipitocervical fixation system of claim 21, wherein the plate is bendable along at least two generally parallel axes.

50. (Previously Presented) The occipitocervical fixation system of claim 21, wherein the plate is bendable along at least two generally perpendicular axes.

51. (Currently Amended) An occipital plate comprising:  
a front side and a back side, a central portion, and at least one leg portion  
having a V-shaped rod-receiving first recess and an arcuate stepped-in portion;  
at least one bone screw hole in the central portion;  
at least one pivotable clamping portion disposed on the front side of the at  
least one leg portion;

wherein the at least one leg portion includes a post hole and the at least one  
clamping portion includes a pivot member and a clamp plate; the pivot member being sized  
and configured to mate with the clamp plate and the post hole and the clamp plate includes a  
rod-receiving second recess sized and configured to align with the V-shaped first recess and  
an extension sized and configured to engage the arcuate stepped-in portion.

52. (Canceled)

53. (Currently Amended) The occipital plate of claim 51 ~~52~~, wherein the  
arcuate stepped in-portion extends through an angle of about 80 degrees to about 120  
degrees.

54. (Previously Presented) The occipital plate of claim 51, wherein  
the pivot member further comprises a tapered portion with serrations, and the post hole  
further comprises a tapered hole with serrations, wherein the serrations of the tapered portion  
positively engage the serrations of the tapered hole.

55. (Currently Amended) The occipital plate of claim 54, wherein the  
diameter of the tapered hole decreases ~~increases~~ from the back side to the front side.

56. (Previously Presented) The occipital plate of claim 51, wherein  
the clamp plate is secured to the pivot member with a fastener.

57. (Canceled)

58. (Currently Amended) The occipital plate of claim 51 ~~57~~, wherein the  
second recess is serrated.

59. (Canceled)

60. (Previously Presented) The occipital plate of claim 51, wherein the plate further includes a spinal rod; the spinal rod being positionable in the at least one clamp portion by insertion from a top portion of the assembly.
61. (Previously Presented) The occipital plate of claim 51, wherein the central portion includes an upper portion, a lower portion, and a grooved portion therebetween, the upper portion having one bone screw hole.
62. (Previously Presented) The occipital plate of claim 61, wherein the grooved portion is flexible to permit the upper portion to be disposed at an angle with respect to the lower portion.
63. (Previously Presented) The occipital plate of claim 51, wherein the leg portions and at least a portion of the central portion are disposed in nonparallel planes.
64. (Previously Presented) The occipital plate of claim 63, wherein the planes intersect at an angle of between about 160° and about 175 °.
65. (Previously Presented) The occipital plate of claim 63, wherein the planes intersect at an angle of about 170°.
66. (Previously Presented) The occipital plate of claim 51, wherein the bone screw holes in the lower portion are disposed in a rectangular array.
67. (Previously Presented) The occipital plate of claim 66, wherein at least one group of bone screw holes in the array is disposed along a central axis of the plate extending between the leg portions.
68. (Previously Presented) The occipital plate of claim 67, wherein the bone screw hole in the upper portion is disposed on the central axis.
69. (Previously Presented) The occipital plate of claim 51, wherein at least two bone screw holes are disposed coaxially.
70. (Previously Presented) The occipital plate of claim 51, wherein the plate further includes a bushing; the at least one bone screw hole being sized and configured to receive the bushing to permit polyaxial angulation.



71. (Previously Presented) The occipital plate of claim 70, wherein the exterior surface of the bushing has a frustospherical shape.

72. (Previously Presented) The occipital plate of claim 70, wherein the bushing further includes at least one slot located on a sidewall thereof.

73. (Previously Presented) The occipital plate of claim 72, wherein the sidewall further includes a ridge.

74. (Previously Presented) The occipital plate of claim 51, wherein the plate is bendable along at least two generally parallel axes.

75. (Previously Presented) The occipital plate of claim 51, wherein the plate is bendable along at least two generally perpendicular axes.